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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,749	12/18/2000	Sue-Ken Yap	169.1912	1352

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EXAMINER

CAPUTO, LISA M

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 06/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/737,749

Applicant(s)

YAP, SUE-KEN

Examiner

Lisa M Caputo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2003 and 20 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 and 37-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-35, 37-39, and 41-51 is/are allowed.
- 6) ☒ Claim(s) 40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☒ Interview Summary (PTO-413) Paper No(s) 9, 11, 12.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Amendment

1. Receipt is acknowledged of the amendments filed 28 February 2003 and 20 May 2003.

Specification

2. The abstract of the disclosure is objected to because the legal words "means" and "said" appeared in the abstract. Correction is required. See MPEP § 608.01(b). Examiner's suggestion for correction of the abstract is seen below, which was accepted by Michael Kondoudis on 14 May 2003.

In the abstract:

A context sensitive device includes a card portion (101) having a number of user interpretable icons (e.g. 122), an electronic apparatus (106) attached to the card portion (101) which includes a memory in which are retained character strings, including contextual information, associated with corresponding icons (122). The apparatus (106) also has a processor unit coupled to a memory unit, and a communication unit for coupling the processor to a reading device (302), which is configured to facilitate reading the context sensitive device. The processor is configured to relate reading signals resulting from a user selection of one of the icons (122), and received via the communication unit with at least one of the stored character strings, to thus transmit an output signal for indicating a desired service based on the contextual information. See "Version with Markings to Show Changes Made".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 40 is rejected under 35 U.S.C. 102(b) as being anticipated by Rovin (U.S. Patent No. 5,049,728).

Rovin teaches an IC card system with removable IC modules having all of the elements and means as recited in claim 40. Rovin discloses that FIG. 1 is a top full-sized view of a conventional prior art IC card 10 which currently is in commercial use. The IC card 10 has an embedded microcomputer and memory circuit 11 located in the upper left-hand corner of the card, as shown in FIG. 1. This microcomputer circuit is generally of the size and dimensions of a United States penny. FIG. 2 is an enlargement of the exposed surface of the embedded IC circuit which shows a plurality of electrical contacts 15 located on this surface. When the card 10 of FIG. 1 is used, it is inserted into a reader 12, illustrated by dotted lines in FIG. 1, which has probes or contacts configured to interconnect with the different contacts 15 on the surface of the embedded IC chip 11 placed on the card. The program of the microprocessor in the IC 11, in conjunction with the memories associated with it, permits the card to be used to conduct transactions in accordance with the program and/or information stored in the memories of the IC unit 11 in the card 10. As mentioned in the background portion of this specification, several different uses of such cards currently exist. With a card of the type shown in FIGS. 1 and 2, it is necessary to use different cards 10 for effecting

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transactions with each different host system or host computer. For example, one card is required for use with banking machines, another card is used for effecting keyless door lock entry, while still another card is required for controlling fund transfers in conjunction with retail point of sale transactions. The result is that as such cards become increasingly popular, a consumer could end up carrying a small "stack" of such cards, much as is the current case today with standard credit cards. The embodiment shown in FIGS. 3 through 11 is a significant modification and expansion of the limited use IC card, such as the card 10 of FIG. 1, to permit a single card 10 to be utilized to perform a number of different functions and/or to interface with different host computers for effecting different types of transactions. Reference first should be made to FIGS. 8, 9, 10, and 11, which illustrate some of the basic modifications or changes to the card which have been made to permit this expanded use. The card is formed of at least two laminated plastic layers 10 and 59, (shown most clearly in FIG. 9) which have four parallel network bus conductors 70, 80, 90, and 100, sandwiched between them. The conductor extends in a pattern from beneath the embedded IC unit 11 underneath five additional receptacles (one of which, 56, is shown in detail in FIG. 6) located in two parallel lines and into which five removable IC module units 40, 42, 44, 46, and 48 are placed. As is readily apparent from an examination of FIGS. 3, 4, and 8, these modules are circular in configuration, with the same external diameter as the embedded IC unit 11. To ensure proper orientation of the modules 40, 42, 44, 46, and 48, over the network bus conductors 70, 80, 90, and 100, each module is asymmetrically notched.

These notches with corresponding projections into the receptacles or openings through the layer 10 into which the modules are placed (as shown most clearly in FIG. 6).

As illustrated in FIGS. 9, 10, and 11, the embedded IC unit 11 has a plurality of contacts 61 on the bottom; and these contacts are in electrical contact with the ends of the network bus conductors 70, 80, 90, and 100. Thus, an electrical interface is provided between the contacts 15 on the surface of the embedded IC unit 11 with the bus conductors 70, 80, 90, and 100 to permit signals applied to the surface contacts 15 of the IC unit 11 to pass either directly through the unit 11 to the bus conductors 70, 80, 90, and 100 or to permit utilization of the embedded IC unit 11 as a network controller and data server communicating information to the bus conductors. Each of the removable IC module units (resembling penny-sized plastic tokens) include microprocessors, memories, and the necessary circuit interconnections embedded in non-conductive plastic with exposed contacts 62 on the bottom. When any one of the removable modules 40, 42, 44, 46, or 48 is placed in any one of the positions shown in FIG. 8, the contacts on the bottom of the module interconnect with the corresponding network bus conductors 70, 80, 90, and 100; so that electrical communication with these bus conductors and the conductors 61 on the bottom the IC unit 11 is effected. It should be noted in FIGS. 3, 4, and 8 that the notches in the removable IC modules or face toward the left in the upper row and toward the right in the lower row. This is done to provide the same orientation with respect to the bus conductors 70, 80, 90, and 100, since these conductors extend toward the right from the embedded IC unit 11 in the upper row and then downwardly and back toward the left in the bottom row. The

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projections in the receptacles in the layer 10 of the laminated card ensure the proper orientation and electrical connection of the removable module units irrespective of where they are placed on the card. The removable module units 40, 42, 44, 46, and 48 are made to be easily inserted and replaced in accordance with the particular program information included in them for utilization with a desired host computer system. Consequently, they could fall out of the receptacles through the card 10 and be lost. Accordingly, a provision is made to hold them in place and still permit easy access to them whenever insertion of a module unit or removal of a module unit is desired. This is accomplished by the provision of a slide cover plate 20 made of electrically conducting material, preferably spring steel or the like. The plate 20 has a central portion with two aligned longitudinal slots 21 and 23 in it. These slots are placed over a pair of rivets 24 and 25 attached to the upper layer 10 of the laminated IC card. The heads of the rivets 24 and 25 extend over the edges of the slots 21 and 23, as illustrated most clearly in FIG. 7. Consequently, the plate 20 is movable from the position shown in FIG. 3 to the position shown in FIG. 4 and back again, with the lengths of the slots 21 and 23 and the positions of the rivets 24 and 25 determining the limits of movement which are illustrated in FIGS. 3 and 4. The plate 20 has five outwardly extending cover flanges or plates 30, 32, 34, 36, and 38 which, in the closed position of FIG. 3, overlie the removable IC unit modules 40, 42, 44, 46, and 48, respectively. Each of these cover flanges 30, 32, 34, 36, and 38, has a corresponding downwardly projecting dimple, such as the dimples 35, 37, and 33, shown in FIGS. 5, 6, and 9, respectively. These dimples correspond with mating semispherical recesses 41, 43, 45, 47, and 49, located in the

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center of the removable IC module units 40, 42, 44, 46, and 48, respectively. The result is that when the cover plate 20 is moved to the position shown in FIG. 3, the dimples under each of the extending cover flanges, such as 34 and 36, shown in FIGS. 5 and 6, press into the mating recesses, such as 45 and 47, of the IC module located beneath them to press the corresponding module in place. This holds it in tight electrical engagement with the network bus conductors 70, 80, 90, and 100, and also prevents the removable IC module units from falling out of the recesses in the top layer 10 of the card. When it is desired either to remove a removable IC module unit from the card or to place a new one into an open receptacle the cover plate 20 is moved to the position shown in FIG. 4. In this position, all of the module positions are exposed. It should be noted that when the cover plate 20 is moved between the two positions shown in FIGS. 3 and 4, the dimples, such as 35 and 37, ride up onto the surface of the removable modules and also onto the surface of the card 10 bending the corresponding cover flanges 30, 32, 34, 36, and 38 upwardly against the spring action of the material out of which the plate 20 is made. When the plate is in the position shown in FIG. 3, the nesting of the dimples, such as 35 and 37, into the corresponding recesses, such as 45 and 47, of the underlying removable IC module units acts as a detent to hold the plate 20 against accidental dislodgement. FIG. 6 illustrates in detail the interrelationship between the cover plate 20 and the cover flanges, such as the cover flange 36 with respect to the removable IC module unit 46 and the receptacle 56. Receptacles such as the receptacles 54 and 56, shown in FIGS. 5 and 6, correspond with each of the removable IC module units 40, 42, 44, 46, and 48, in the positions shown in FIGS. 3

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and 4. One or more of these module units may be used at any time, depending upon the number of different programs and the number of different host computers with which the system is designed to interact. From the foregoing, it can be seen that a single IC card, such as the card shown in FIGS. 3 through 11, is capable of replacing six individual separate IC cards of the type commonly in use today. Furthermore, it is possible to change the various programs or host computer systems with which the card is used, at any time simply by placing a new removable IC module unit or token into one of the corresponding receptacles, or by replacing one of the IC module units 40, 42, 44, 46, and 48 with a different one. To further expand the multiple on line capability of the system, a magazine for holding several cards 10 may be used. Such a magazine can be used to place multiple cards, each with several modules on it, in position for use with a single card reader. The cards may be interconnected with buses in the magazine, or they each may simply be available for individual presentation to a card reader 12. The foregoing description of the preferred embodiment of the invention should be considered as illustrative of the invention and not as limiting. Various changes and modifications will occur to those skilled in the art without departing from the true scope of the invention as defined in the appended claims. For example, the illustration used shows four bus conductors 70, 80, 90, and 100, as the network bus conductors. This number of conductors clearly can be varied in accordance with the operating conditions of the system. For example, a single conductor may be used for multiplex operations, and for parallel operations the number of conductors may be increased or decreased in accordance with the system requirements. In addition, the technique for ensuring proper

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orientation of the removable IC unit modules may be changed from the mating notches and projection structures which are illustrated in the drawings. The configuration of the cover plate 20 also may be varied, as well as the manner in which the cover plate is attached to the layer 10 of the laminated IC card to permit the sliding movement which is shown. All such changes and others which will occur to those skilled in the art are considered to be clearly within the scope of this invention (see Figures 1-11, col 3 line27 to col 6 line 37). Hence Rovin teaches an IC card (the control template) for insertion into a reader (template reader) where the IC card has removable IC modules (user selectable control icons) and memory (storage means for storing a plurality of data) as recited in claim 40 of the instant application.

Allowable Subject Matter

4. Claims 1-35, 37-39, and 41-51 are allowed.
5. The following is an examiner's statement of reasons for allowance:

The best prior art of record fails to teach the specific arrangement of the context sensitive device for selecting a service from a plurality of services wherein there is a card portion that is attached to an electronic apparatus, which has its own memory for retaining a plurality of data items. The best prior art of record of Combaluzier does teach a control unit connectable with a smart card wherein the data is disposed on the back of the card. However, Combaluzier fails to teach the specific arrangement of the data-selectable card with the electronic apparatus that has a plurality of additional information stored for multiple-choice selections as recited in independent claims 1, 16, 26, 35, 37, 46, 48, and 50-51.

Hence the best prior art of record fails to teach the invention as set forth in claims 1-35, 37-39, and 41-51 and the examiner can find no reasons within the cited prior art or on her own to combine the elements of these references other than the applicant's own reasoning to fully encompass the current pending claims. In addition, see applicant's reasoning in amendment/response of paper numbers 8 and 10.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

6. Applicant's arguments, see paper numbers 8 and 10, filed 28 February 2003 and 20 May 2003, respectively, with respect to claims 1-35, 37-39, and 41-51 have been fully considered and are persuasive. The rejection of claims 1-35, 37-39, and 41-50 has been withdrawn.

7. Applicant's arguments with respect to claim 40 have been considered but are moot in view of the new ground(s) of rejection.

Upon further reconsideration and search by the supervisor, new art in the form of Rovin has been applied to claim 40. See 35 U.S.C. 102 rejection above. Examiner apologizes for any inconvenience.

Conclusion

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8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 6,257,486 to Teicher et al. which discloses a smart card pin system, card, and reader.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Lisa M. Caputo** whose telephone number is **(703) 308-8505**. The examiner can normally be reached between the hours of 8:30AM to 5:00PM Monday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 703-305-3503. The fax phone number for this Group is (703)308-7722, (703)308-7724, or (703)308-7382.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [lisa.caputo@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

LMC
May 30, 2003


MICHAEL G. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

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Version with Markings to Show Changes MadeIn the abstract:

A context sensitive device includes a card portion (101) having a number of user interpretable icons (e.g. 122), an electronic apparatus (106) attached to the card portion (101) which includes a memory in which are retained character strings, including contextual information, associated with corresponding icons (122). The apparatus (106) also has a processor [means] unit coupled to [said] a memory [means] unit, and a communication [means] unit for coupling the processor to a reading device (302), which is configured to facilitate reading the context sensitive device. The processor is configured to relate reading signals resulting from a user selection of one of the icons (122), and received via the communication [means] unit with at least one of the stored character strings, to thus transmit an output signal for indicating a desired service based on the contextual information.